

State of New Jersey
Department of Environmental Protection
Air Quality Permitting
Bureau of Preconstruction Permits

General Permit
Small Emitter General Air Permit (SEGAP)

This General Permit allows for the construction, installation, reconstruction, modification and operation of a source operation having a single emission point with an uncontrolled potential to emit (PTE) less than the reporting threshold for all air contaminant emissions. The following source category is eligible for this General Permit:

- Equipment in which the combined weight of all raw materials used exceeds 50 pounds in any one hour, in accordance with N.J.A.C. 7:27-8.2(c)19. In determining the weight of the raw materials used, the weight of the following shall be excluded, in accordance with N.J.A.C. 7:27-8.2(c)19ii.
 - Air;
 - Water;
 - Containers, as long as the container is not consumed as part of the operation; and
 - Paper, metal or plastic that is twisted, bent or folded in the operation, as long as it does not cause visible emissions.

I. DEFINITIONS

The terms and phrases listed used in this document shall have the same meaning as in N.J.A.C. 7:27-8, and/or as listed below:

“Department” means the New Jersey Department of Environmental Protection.

“Distillates of Air” means helium (He), nitrogen (N₂), oxygen (O₂), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe).

“Emission Point” means the location where air contaminants are physically released into the atmosphere. An emission point can be, but is not limited to, multiple stacks, wall vents, chimneys, conduits, openings, windows, doors, or general building ventilation exhausts located in a single room.

“Non-Hazardous Air Pollutant” or “Non-HAP” means an air contaminant that is not listed in 42 U.S.C. 7412(b).

“Potential To Emit” or “PTE” means the maximum aggregate capacity of a source operation to emit an air contaminant under its physical and operational design. Source-related fugitive emissions shall be included in the determination of potential to emit. For the purpose of this General Permit, physical and operational limitations on the capacity of a source operation or the emission of an air contaminant, including any limitation on fugitive emissions as a result of any applicable requirement, control apparatus, and restrictions on hours of operation or on the type or amount of material processed, are not considered part of its design.

“Reporting Threshold” means the quantity of air contaminant emissions above which a source operation is not eligible for this General Permit. The quantity of air contaminant emissions is based on the uncontrolled potential to emit (PTE) from a source operation for all air contaminants specified in Section VI of this document. Note: Thresholds for some of the air contaminants specified in Section VI are more stringent than the reporting thresholds in N.J.A.C. 7:27-8 and 22.

“Source Operation” means any process, or any identifiable part thereof, that emits or can reasonably be anticipated to emit any air contaminant either directly or indirectly into the outdoor atmosphere. A source operation may include one or more pieces of equipment or control apparatus.

“Toxic Substance” or “TXS” means a substance listed in Table 1 of N.J.A.C. 7:27-17.

II. AUTHORITY

This General Permit is issued under the authority of N.J.S.A. 26:2C-9.2. This General Permit shall allow for inspection and evaluation to assure conformance with all provisions of N.J.A.C. 7:27 et seq. An opportunity for public comment on this General Permit was provided on October 3, 2004.

III. APPLICABILITY

This General Permit shall apply to one source operation having a single emission point with an uncontrolled potential to emit (PTE) less than the hourly reporting threshold, specified in Section VI of this document, for all air contaminant emissions. All significant source operations venting through the emission point must be identified in this General Permit.

Unless otherwise excluded in Section IV below, the following source category is eligible for this General Permit:

- Equipment in which the combined weight of all raw materials used exceeds 50 pounds in any one hour, in accordance with N.J.A.C. 7:27-8.2(c)19.
In determining the weight of the raw materials used, the weight of the following shall be excluded, in accordance with N.J.A.C. 7:27-8.2(c)19ii.
 - Air;
 - Water;
 - Containers, as long as the container is not consumed as part of the operation; and
 - Paper, metal or plastic that is twisted, bent or folded in the operation, as long as it does not cause visible emissions.

The PTE of each air contaminant for the source operation covered by this General Permit shall be less than the applicable hourly reporting thresholds listed in Section VI of this document (The thresholds in Section VI apply to the *entire* source operation, unlike the reporting thresholds in N.J.A.C. 7:27-8, which apply to *each piece of equipment* in a source operation).

To determine that a permittee is eligible to receive this General Permit, the permittee shall calculate the PTE of the source operation using one of the following methods:

- Continuous emissions monitoring; or
- Predictive emissions monitoring; or
- Source emission testing; or
- Mass/Material balance; or

- AP-42 emission factor or other EPA-approved emission estimation methodology (for example, TANKS4 and WATER9), or selection of a source emission test for a similar size unit from the AP-42 basis and background documents; or
- Manufacturer's specifications or estimates.

IV. EXCLUSIONS

This General Permit shall not be used for the following sources:

1. Any source operation with more than one “emission point” as defined in Section I (an emission point can be, but is not limited to, multiple stacks, wall vents, chimneys, conduits, openings, windows, doors, or general building ventilation exhausts located in a single room);
2. Any source operation equipped with an air pollution control apparatus if the PTE of any air contaminant before control (“uncontrolled PTE”) exceeds the hourly reporting thresholds listed in Section VI;
3. Any source operation equipped with an air pollution control apparatus if the apparatus is required by the Department to be used for odor control;
4. Any source operation with uncontrolled PTE of any air contaminant greater than or equal to the hourly reporting thresholds listed in Section VI;
5. Any source operation for which another specific General Permit has been established pursuant to N.J.A.C. 7:27-8.8;
6. Any source operation subject to the requirements of N.J.A.C. 7:27-17 (Toxic Substances);
7. Any source operation subject to the Prevention of Significant Deterioration (PSD) requirements of 40 CFR 52.21, or the emissions offset requirements under N.J.A.C. 7:27-18;
8. Any source operation subject to NSPS, MACT, or NESHAPS requirements;
9. Any combustion source burning any commercial or non-commercial fuel;
10. Any site remediation activity; and
11. Any storage tank.

V. CONTROL DEVICE SPECIFICATIONS

Source operations with an air pollution control apparatus are eligible for a General Permit if the uncontrolled PTE (the PTE before the control apparatus) is below the hourly reporting threshold specified in Section VI for all air contaminants.

VI. POTENTIAL TO EMIT

The Potential to Emit (PTE) for source operations permitted under this General Permit shall not exceed the following hourly reporting thresholds:

CAS NUMBER	AIR CONTAMINANT	HOURLY REPORTING THRESHOLD (LB/HR)
	NON-HAP COMPOUNDS	
	Total VOC	5.00E-02
	TSP	5.00E-02
	PM-10	5.00E-02
	NO _x	5.00E-02
630080	CO	5.00E-02
7446095	SO ₂	5.00E-02
	COMPOUND CATEGORIES	
	Each TXS	1.00E-02
	Each 112(r) contaminant	5.00E-02
	Each stratospheric ozone depleting substance	5.00E-02
	Each greenhouse gas, except CO ₂	5.00E-02
	HAP COMPOUNDS	
75070	Acetaldehyde	5.00E-02
60355	Acetamide	2.28E-02
75058	Acetonitrile	5.00E-02
98862	Acetophenone	2.28E-02
53963	2-Acetylaminofluorene	1.14E-04
107028	Acrolein	9.13E-04
79061	Acrylamide	4.57E-04
79107	Acrylic acid	1.37E-02
107131	Acrylonitrile	6.85E-03
107051	Allyl chloride	2.28E-02
92671	4-Aminobiphenyl	2.28E-02
62533	Aniline	2.28E-02
90040	o-Anisidine	2.28E-02
71432	Benzene	1.00E-02
92875	Benzidine	6.85E-06
98077	Benzotrichloride	1.37E-04
100447	Benzyl chloride	2.28E-03
92524	Biphenyl	5.00E-02
117817	Bis(2-ethylhexyl)phthalate	5.00E-02
542881	Bis(chloromethyl)ether	6.85E-06
75252	Bromoform	5.00E-02
106990	1,3-Butadiene	1.60E-03
156627	Calcium cyanamide	5.00E-02
133062	Captan	5.00E-02

CAS NUMBER	AIR CONTAMINANT	HOURLY REPORTING THRESHOLD (LB/HR)
63252	Carbaryl	5.00E-02
75150	Carbon disulfide	2.28E-02
56235	Carbon tetrachloride	1.00E-02
463581	Carbonyl sulfide	5.00E-02
120809	Catechol	5.00E-02
133904	Chloramben	2.28E-02
57749	Chlordane	2.28E-04
7782505	Chlorine	2.28E-03
79118	Chloroacetic acid	2.28E-03
532274	2-Chloroacetophenone	1.37E-03
108907	Chlorobenzene	5.00E-02
510156	Chlorobenzilate	9.13E-03
67663	Chloroform	1.00E-02
107302	Chloromethyl methyl ether	2.28E-03
126998	Chloroprene	2.28E-02
1319773	Cresols/Cresylic acid	2.28E-02
95487	o-Cresol	2.28E-02
108394	m-Cresol	2.28E-02
106445	p-Cresol	2.28E-02
98828	Cumene	5.00E-02
94757	2,4-D, salts and esters	5.00E-02
547044	DDE	2.28E-04
334883	Diazomethane	2.28E-02
132649	Dibenzofurans	5.00E-02
96128	1,2-Dibromo-3-chloropropane	2.28E-04
84742	Dibutylphthalate	5.00E-02
106467	1,4-Dichlorobenzene	5.00E-02
91941	3,3-Dichlorobenzidine	4.57E-03
111444	Dichloroethyl ether	1.37E-03
542756	1,3-Dichloropropene	2.28E-02
62737	Dichlorvos	4.57E-03
111422	Diethanolamine	5.00E-02
121697	N,N- Dimethylaniline	2.28E-02
64675	Diethyl sulfate	2.28E-02
119904	3,3-Dimethoxybenzidine	2.28E-03
60117	4-Dimethyl aminoazobenzene	2.28E-02
119937	3,3-Dimethyl benzidine	1.83E-04
79447	Dimethyl carbamoyl chloride	4.57E-04
68122	Dimethyl formamide	2.28E-02
57147	1,1-Dimethyl hydrazine	1.83E-04
131113	Dimethyl phthalate	5.00E-02
77781	Dimethyl sulfate	2.28E-03
534521	4,6-Dinitro-o-cresol	2.28E-03
51285	2,4-Dinitrophenol	2.28E-02
121142	2,4-Dinitrotoluene	4.57E-04
123911	1,4-Dioxane	1.00E-02
122667	1,2-Diphenylhydrazine	2.05E-03
106898	Epichlorohydrin	4.57E-02
106887	1,2-Epoxybutane	2.28E-02
140885	Ethyl acrylate	2.28E-02
100414	Ethyl benzene	5.00E-02
51796	Ethyl carbamate	1.83E-02
75003	Ethyl chloride	5.00E-02

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CAS NUMBER	AIR CONTAMINANT	HOURLY REPORTING THRESHOLD (LB/HR)
106934	Ethylene dibromide	2.28E-03
107062	Ethylene dichloride	1.00E-02
107211	Ethylene glycol	5.00E-02
151564	Ethylene imine	6.85E-05
75218	Ethylene oxide	2.28E-03
96457	Ethylene thiourea	1.37E-02
75343	Ethylidene dichloride	2.28E-02
50000	Formaldehyde	4.57E-02
76448	Heptachlor	4.57E-04
118741	Hexachlorobenzene	2.28E-04
87683	Hexachlorobutadiene	2.05E-02
77474	Hexachlorocyclopentadiene	2.28E-03
67721	Hexachloroethane	5.00E-02
822060	Hexamethylene 1,6-diisocyanate	4.57E-04
680319	Hexamethylphosphoramide	2.28E-04
110543	Hexane	5.00E-02
302012	Hydrazine	9.13E-05
7647010	Hydrochloric acid	5.00E-02
7664393	Hydrogen fluoride	2.28E-03
123319	Hydroquinone	2.28E-02
78591	Isophorone	5.00E-02
58899	Lindane	2.28E-04
108316	Maleic anhydride	2.28E-02
67561	Methanol	5.00E-02
72435	Methoxychlor	5.00E-02
74839	Methyl bromide	5.00E-02
74873	Methyl chloride	5.00E-02
71556	Methyl chloroform	1.00E-02
78933	Methyl ethyl ketone	5.00E-02
60344	Methyl hydrazine	1.37E-03
74884	Methyl iodide	2.28E-02
108101	Methyl isobutyl ketone	5.00E-02
624839	Methyl isocyanate	2.28E-03
80626	Methyl methacrylate	5.00E-02
1634044	Methyl tert butyl ether	5.00E-02
101144	4,4-Methylene bis(2-chloraniline)	4.57E-03
75092	Methylene chloride	1.00E-02
101688	4,4-Methylene diphenyl diisocyanate	2.28E-03
101779	4,4'-Methylene dianiline	2.28E-02
91203	Naphthalene	5.00E-02
98953	Nitrobenzene	2.28E-02
92933	4-Nitrobiphenyl	2.28E-02
100027	4-Nitrophenol	5.00E-02
79469	2-Nitropropane	2.28E-02
684935	N-Nitroso-N-methylurea	4.57E-06
62759	N-Nitrosodimethylamine	2.28E-05
59892	N-Nitrosomorpholine	2.28E-02
56382	Parathion	2.28E-03
82688	Pentachloronitrobenzene	6.85E-03
87865	Pentachlorophenol	1.60E-02
108952	Phenol	2.28E-03
106503	p-Phenylenediamine	5.00E-02
75445	Phosgene	2.28E-03

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CAS NUMBER	AIR CONTAMINANT	HOURLY REPORTING THRESHOLD (LB/HR)
7803512	Phosphine	5.00E-02
7723140	Phosphorus	2.28E-03
85449	Phthalic anhydride	5.00E-02
1336363	Polychlorinated biphenyls	2.05E-04
1120714	1,3-Propane sultone	6.85E-04
57578	beta-Propiolactone	2.28E-03
123386	Propionaldehyde	5.00E-02
114261	Propoxur	5.00E-02
78875	Propylene dichloride	2.28E-02
75569	Propylene oxide	5.00E-02
75558	1,2-Propylenimine	6.85E-05
91225	Quinoline	1.37E-04
106514	Quinone	5.00E-02
100425	Styrene	2.28E-02
96093	Styrene oxide	2.28E-02
1746016	2,3,7,8-TCDD	1.37E-08
79345	1,1,2,2-Tetrachloroethane	6.85E-03
127184	Tetrachloroethylene	1.00E-02
7550450	Titanium tetrachloride	2.28E-03
108883	Toluene	5.00E-02
95807	2,4-Toluene diamine	4.57E-04
584849	2,4-Toluene diisocyanate	2.28E-03
95534	o-Toluidine	2.28E-02
8001352	Toxaphene	2.28E-04
120821	1,2,4-Trichlorobenzene	5.00E-02
79005	1,1,2-Trichloroethane	1.00E-02
79016	Trichloroethylene	1.00E-02
95954	2,4,5-Trichlorophenol	2.28E-02
88062	2,4,6-Trichlorophenol	5.00E-02
121448	Triethylamine	5.00E-02
1582098	Trifluralin	5.00E-02
540841	2,2,4-Trimethylpentane	5.00E-02
108054	Vinyl acetate	2.28E-02
593602	Vinyl bromide	1.37E-02
75014	Vinyl chloride	4.57E-03
75354	Vinylidene chloride	9.13E-03
1330207	Xylenes	5.00E-02
95476	o-Xylenes	5.00E-02
108380	m-Xylenes	5.00E-02
106423	p-Xylenes	5.00E-02
	HAP CHEMICAL COMPOUND CLASSES	
	Antimony compounds	5.00E-02
7783702	Antimony pentafluoride	2.28E-03
8300745	Antimony potassium tartrate	2.28E-02
1309644	Antimony trioxide	2.28E-02
1345046	Antimony trisulfide	2.28E-03
	Arsenic & inorganic arsenic compounds	1.14E-04
7784421	Arsine	1.14E-04
	Beryllium compounds	1.83E-04
	Beryllium salts	4.57E-07
	Cadmium compounds	2.28E-04
130618	Cadmium oxide	2.28E-04

CAS NUMBER	AIR CONTAMINANT	HOURLY REPORTING THRESHOLD (LB/HR)
	Chromium compounds	5.00E-02
	Hexavalent chromium compounds	4.57E-05
	Trivalent chromium compounds	5.00E-02
10025737	Chromic chloride	2.28E-04
744084	Cobalt metal and compounds	2.28E-03
10210681	Cobalt carbonyl	2.28E-03
62207765	Fluomine	2.28E-03
	Coke oven emissions	6.85E-04
	Cyanide compounds	5.00E-02
151508	Potassium cyanide	2.28E-03
143339	Sodium cyanide	2.28E-03
	Glycol ethers	5.00E-02
110805	2-Ethoxy ethanol	5.00E-02
111762	Ethylene glycol monobutyl ether	5.00E-02
108864	2-Methoxy ethanol	5.00E-02
	Lead and compounds	2.28E-04
78002	Tetraethyl lead	2.28E-04
75741	Tetramethyl lead	2.28E-04
7439965	Manganese and compounds	1.83E-02
12108133	Methylcyclopentadienyl manganese	2.28E-03
	Mercury compounds	2.28E-04
7439976	Elemental mercury	2.28E-04
748794	Mercuric chloride	2.28E-04
10045940	Mercuric nitrate	2.28E-04
62384	Phenyl mercuric acetate	2.28E-04
	Nickel compounds	2.28E-02
13463393	Nickel carbonyl	2.28E-03
12035722	Nickel refinery dust	1.83E-03
12035722	Nickel subsulfide	9.13E-04
	Polycyclic organic matter	2.28E-04
56553	Benz(a)anthracene	2.28E-04
225514	Benz(c)acridine	2.28E-04
50328	Benzo(a)pyrene	2.28E-04
205992	Benzo(b)fluoranthene	2.28E-04
218019	Chrysene	2.28E-04
53703	Dibenz(a,h)anthracene	2.28E-04
189559	1,2:7,8-Dibenzopyrene	2.28E-04
57976	7,12-Dimethylbenz(a)anthracene	2.28E-04
193395	Indeno(1,2,3-c,d)pyrene	2.28E-04
7782492	Selenium compounds	2.28E-03
7783075	Hydrogen selenide	2.28E-03
7488564	Selenium sulfide (mono and di)	2.28E-03
13410010	Sodium selenate	2.28E-03
10102188	Sodium selenite	2.28E-03
	Total dioxin and furans	1.37E-08

VII. POLLUTION PREVENTION

The Permittee is encouraged to implement the following pollution prevention measures for the source operation covered by this permit:

1. Conduct regular maintenance on the equipment to ensure that all machinery and processes are working efficiently. Check for leaks and spills, and perform repairs immediately (e.g., tanks, pumps, pipes, etc.). A maintenance logbook should be maintained to keep track of maintenance activities.
2. Maintain spill-kits and instruct employees in the proper use and location of the spill-kits.
3. Reduce spills by use of spigots, pumps, and funnels when dispensing or transferring liquids to and from storage containers.
4. Keep chemicals in safety cans or covered containers between use to reduce evaporation, spills and contamination.
5. Order and manage materials to reduce expiring products, and do not order more inventory than needed.
6. Use the "first in, first out" inventory procedure to reduce waste due to expired material.
7. Inspect material when received for damage or off-specification, and return immediately.
8. Inspect expired material before disposal to determine if the expired material can be salvaged.
9. Review other pollution prevention methods that may be of benefit to the facility in addition to those required in this Compliance Plan.

VIII. COMPLIANCE PLAN

The Equipment covered by this General Permit is subject to the applicable requirements listed on the following pages.

COMPLIANCE PLAN: Small Emitter General Air Permit

Ref. #	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Any operation of equipment which may cause off-property effects, including odors, shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26:2C-19(e)]	None	None	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environmental or which might reasonably result in citizen complaints shall, within 15 minutes, notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26:2C-19(e)]
2	Prohibition of Air Pollution: Notwithstanding compliance with other subchapters of N.J.A.C. 7:27, no person shall suffer, allow, or permit to be emitted into the outdoor atmosphere substances that result in air pollution as defined at N.J.A.C. 7:27-5.1. [N.J.A.C. 7:27-5]	None	None	None
3	In order to construct or install new equipment; or modify or reconstruct existing equipment, the Permittee must either obtain a new Preconstruction Permit or a new General Permit. [N.J.A.C. 7:27-8.3(a)]	None	None	None
4	The permittee shall ensure each piece of equipment that is the subject of this General Permit is clearly identifiable, by clear and conspicuous labeling, using the NJID numbers used in this permit. [N.J.A.C. 7:27-8.13(a)]	None	For the life of the permit, the permittee shall maintain and update an inventory listing the equipment that is the subject of this General Permit, including the NJID numbers used in this permit and the facility's designation for each piece of equipment. This information shall be kept on site at all times. [N.J.A.C. 7:27-8.13(a)]	None
5	No Visible Emissions: The source operation shall not be used in a manner that will cause any visible emissions, exclusive of condensed water vapor. [N.J.A.C. 7:27-8.13(a)]	None	None	Notify by phone: Upon occurrence of visible emissions, the permittee shall notify the Department within 15 minutes of the event. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.A.C. 7:27-8.13(a)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Emissions of all air contaminants shall be below all hourly reporting thresholds specified in Section VI of this General Permit, a copy of which can be obtained at http://www.nj.gov/dep/aqpp/gp.html . [N.J.A.C. 7:27-8.13(a)]	Prior to commencement of operation, and prior to any change in operation, the permittee shall calculate maximum potential hourly emissions for each product and/or process using production records and one of the following methods: Continuous emissions monitoring; predictive emissions monitoring; source emission testing; mass/material balance; AP-42 emission factor or other EPA-approved emission estimation methodology (for example, TANKS4 and WATER9), or selection of a source emission test for a similar size unit from the AP-42 basis and background documents; or manufacturer's specifications or estimates. [N.J.A.C. 7:27-8.13(d)]	Maintain emissions calculation records to verify that emissions of all air contaminants are below the hourly reporting thresholds specified in Section VI of this General Permit, including production records, raw material list, and the method used to calculate actual emissions. All records, including those associated with the methods used to determine eligibility for this General Permit, must be readily accessible and be made available to the Department for a minimum of 5 years. [N.J.A.C. 7:27-8.13(d)]	None
7	Upon request of the Department, the permittee shall demonstrate via sampling, monitoring, and/or stack emission testing, at any time during the permit term, that actual emissions of all air contaminants are below all hourly reporting thresholds specified in Section VI of this General Permit, a copy of which can be obtained at http://www.nj.gov/dep/aqpp/gp.html . [N.J.A.C. 7:27-8.13(d)]	None	None	None
8	Maximum No. of Billable Compliance Inspections <= 2 inspections. The equipment covered by this permit will be subject to inspection fees for the maximum periodic compliance inspections (as defined in N.J.A.C. 7:27-8.1) over the life of the Certificate. The permittee will be invoiced for a service fee per inspection pursuant to N.J.A.C. 7:27-8.6 after the periodic compliance inspection is conducted. [N.J.A.C. 7:27-8.13(e)]	None	None	None